

REMARKS

There are 18 claims pending in the application comprising claims 28-45. Claim 36 has been rewritten in an independent form, as discussed below.

Applicants appreciate the courtesies extended to their representative, Allan A. Fanucci, during a telephone conference with Examiner Con P. Tran on January 3, 2007, where the propriety of the finality of the current office action was discussed. The following comments summarize this discussion.

It is applicant's position that the present action should not have been made final. The current action was made in response to an amendment by applicant where arguments but no claim amendments were submitted to overcome the prior rejection. The present action now repeats portions of the previous rejection with the addition of further references. The comments made by the applicant were not addressed in the current response. Since applicant did not amend the claims in the prior response, that is not a basis for making the present action final.

The Examiner explained that the present rejection is properly made final because the new references cited in the current rejection were necessitated by applicant's presentation of claims 28-45 in an earlier amendment and response. It is respectfully submitted that this reasoning does not support making the present action final.

MPEP section 706.07 (a) states the conditions upon which a second office action can be made final. This section states that:

Under present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p).

Furthermore, a second or any subsequent action on the merits in any application or patent undergoing reexamination proceedings will not be made final if it includes a rejection, on newly cited art,

As applicant's submission of new claims 28-45 completely overcame the rejection based on the Spitzer patent, and since the new rejections that have been made are not based on the Spitzer patent or on any references that applicant submitted with their new claims, it is respectfully submitted that the conditions set forth in the MPEP are not met and that the present

action should not be made final. The Examiner stated that he does not agree with applicant's position, so that applicant reserves the right to appeal, petition or otherwise contest the finality of the present office action should this be necessary in the further prosecution of this application.

Before addressing the rejection, brief review of the features of the present invention may be helpful. The present invention is primarily directed to a surgical operating theater where much of the wearer's lower face is typically covered by a surgical mask and much of the head is covered by a surgical cap. Eyewear comprises a microphone, a speaker, and an eyewear neck strap that couples the microphone and speaker to a wearer unit carried by the eyewear wearer. The wearer unit exchanges wireless signals with a base station. The base station is coupled to various devices such as surgical theater equipment, and/or to a telecommunication system, such as a telephone system. The eyewear enables the wearer to conduct hands-free communication such as telephone conversations and command and control operations. Eyewear is configured such that speaker is held away from the wearer's ear so that a gap exists between speaker and the wearer's external outer ear. Gap is made large enough so that external sound is not obstructed from reaching the wearer's ear canal. Thus, an advantage of the present invention is that it allows a surgeon, for example, to conduct command and control operation via the speaker and microphone, and at the same time hear the surrounding environment of a surgical operating room.

Although a large housing or a boom can be used to position a microphone close to the wearer's mouth, medical personnel, especially surgeons, prefer to keep as much equipment as possible away from their face and away from the mask and cap. If a boom is used, the microphone position can be altered if the boom is displaced when removed from the wearer's head. A boom can snag on other objects. Thus an advantage of the integral microphone housing is that the wearer is unaware of the microphone's presence. The microphone remains in the correct position during eyeglasses use and storage, and no microphone position readjustment is required.

In the present Office Action, Claims 28-29, 32, 37, and 39 are rejected under 35 U.S.C. §103(a) as being obvious over Syngator U.S. Patent 3,807,526 in view of McManigal U.S. Patent 5,327,178 (hereinafter, "McManigal").

Applicant previously responded to a prior office action and distinguished the present claims from the Syngator patent. For this reason, the McManigal patent is cited.

To reiterate, Sygnator, the primary reference, is directed to an ear protection device in which the ear protector is attached to a temple bar covering the ear and reducing the high decibel noise levels such as constant and recurring sounds encountered in industrial operations from punch presses, riveting operations and many others. In order to protect the person's hearing, the Syngator device is a pad that completely blocks the wearer's ear to block sounds from entering. Nowhere does Sygnator describe or suggest that the ear protector can or does act as a speaker or that the configuration permits the wearer to hear environmental sounds without significant obstruction. Indeed, the present invention is completely contradictory to the intended goal of Sygnator.

First, if the Sygnator device is configured in the same fashion as the present invention, then the gap which is sufficient to permit the wearer to hear environmental sounds without obstruction would fail to protect the wearer from high decibel sounds. Furthermore, the speaker that is positioned away from the outer ear would have to compete with background high decibel noise, and as such doubling the potentially harmful sound waves when the speaker is in operation, and thus, negating the fundamental purpose of the Sygnator device. Second, the addition of an even gradient microphone such as one that is configured according to the present invention in Syngator would not be operative. Certainly, such a microphone would transmit to the recipient the same high decibel sounds that Syngator is trying to block from entering the wearer's ears. Also, even if the wearer could transmit sounds by such a microphone, there is no teaching to provide a speaker onto or as part of the sound blocking pad of Syngator so that the wearer can receive a communication in reply. Therefore, Syngator certainly is not relevant to the present claims, and McManigal is cited to provide the disclosure that is missing from Syngator.

McManigal does disclose an earstem with a speaker that is spaced away from the wearer's ear so that the wearer can also hear ambient sounds. There is absolutely no motivation in McManigal that would suggest that it should be combined with Syngator.

During the telephone interview, applicant's representative presented the foregoing comments regarding the lack of motivation to combine the Sygnator and McManigal patents. Sygnator's teaching of preventing or blocking the hearing of ambient sounds is completely inconsistent with McManigal's teaching to withdraw the speaker so that the wearer can hear such ambient sounds. In addition, it should be noted that Syngator has no speaker and is intending to block sounds from entering the wearer's ear, so that there is no reason for a skilled artisan to first

add a speaker to Syngator's earpad and then retract that pad and speaker away from the wearer's ear. And even if it might be obvious to add a speaker to Syngator so that the wearer can receive communications that he or she would otherwise not be able to hear, there certainly would be no reason to withdraw or retract the speaker since that would defeat Syngator's purpose of providing ear protection. Accordingly, McManigal teaches away from Syngator rather than suggesting a modification of Syngator to obtain the presently claimed invention.

In the office action claims 37 and 39 were rejected because "Sygnator further discloses wearer unit such as cellular telephone coupled to the speaker and the microphone via junction connector 2.234, Fig.16; col. 17, line 58 - col. 113, line 2)". However, there is no such disclosure in Sygnator. As noted above, adding a microphone to a headset for use in a high noise environment is inconsistent with Syngator's objective, and there is no teaching in Syngator as to how to configure such a microphone for use in high noise environments.

Claim 30-31, and 33-35 are rejected under 35 U.S.C. §103(a) as being obvious over Sygnator in view of McManigal, and further in view of Green et al. U.S. Patent 6,176,576 (hereinafter, "Green").

Green discloses an eyewear with earpieces supported from a wearer's ear with optional audio apparatus for use by the wearer, having a front frame browpiece portion including a front transparent panel that may be tinted and/or may be designed to correct vision impairments, being supported on a wearer's head by a nose bridge and by at least one earpiece or earplug that is received into the concha of the wearer's ear and/or into the ear canal. The earpiece or earplug is attached to a rear end of its respective temple of the eyewear and the respective temple for the earpiece or earplug is not supported over the wearer's ear. Both temples are only supported by their respective rear earpiece or earplug. The earpieces of some embodiments sealingly and protectively plug the ear canal of the wearer. The eyewear may include an optional microphone, whether as a boom-mounted microphone or an ear microphone, and may include audio earpieces for reproducing sound from an audio signal source. The temples may have length adjustments and may have spread adjustments to adjust for various-sized wearers' heads. The temples exert an inward pressure on the earpieces and earplugs so as to retain the eyewear on the wearer's head during physical activity.

Applicants note that Green does not remedy the deficiencies of Syngator and McManigal so that this rejection should be withdrawn. In addition, claims 34-35 recite feature

that are further distinguishable over these references. Claim 34 recites among other things "the microphone mount is carried by the temporal portion". The Examiner cites reference 88 in Fig 5 of Green as the temporal portion of claim 34. According to Green the temporal portion includes a front temporal portion and a rear temporal portion and reference 88 is the rear temporal portion, which in the context of the present invention can be addressed as the speaker support portion (*see*, Col. 11, lines 51-59; Col. 12, lines 15-17). Therefore, this analogy is incorrect.

Claim 35 recites among other things "a cavity within the earstem for retaining a microphone, and a first port inclined downward and forward for permitting entry of a wearer's voice into the cavity". The Examiner asserts that the recess 2.248 in Fig. 17 and 18 is the cavity that retains the microphone 220. However, according to Green the recess 2.248 is not for retaining the microphone but for receiving the curved distal end 2.228 of the microphone boom when retracted, and the microphone is retained in the remote tip 2.230 of the distal end 2.228 (*see*, Col. 17, lines 52-56; Col. 18, lines 7-12). Moreover, even if the boom and the microphone can, for some strange reason, be considered as one member, then clearly recess 2.228 is not retaining the microphone when the boom is in the extended position. In addition, as discussed above, one of the main advantages of the current invention is that it avoids using a microphone boom. Therefore, such an analogy is entirely inappropriate.

Claim 36 is rejected under 35 U.S.C. §103(a) as being obvious over Syngator in view of McManigal in view of Green, and further in view of Cragg et al. U.S. Patent 3,781,492 (hereinafter, "Cragg").

Applicant repeats the comments made above regarding the Syngator, McManigal and Green references. Cragg discloses a headset that includes a main housing containing a miniature demountable earphone, a microphone pre-amp and a snap-on earpiece. The housing is connected to one end of an adjustable boom having a pressure gradient microphone at the other end. Boom tube extends from the lower end of the housing and is adjustably adapted to extend around the user's face towards his mouth. The headset is adapted to be worn by pressure exerted against both sides of the user's head via a band. The microphone has a piezoelectric disc transducer mounted midway from either end of a cylindrical housing and perpendicular thereto, the cylinder halves being separate acoustic resonators of predetermined frequency to provide an upper limit of operation. Like Green, Cragg also call for boom-mounted microphone.

Even if it is appropriate to combine these references as set forth in the office action, the resulting combination does not show or suggest all the features of claim 36. Claim 36 has been rewritten in independent form so as to further emphasize the patentable feature of the combination of a gradient microphone position in the cavity. Disclosures of a boom to extend a microphone to near the wearer's mouth do not suggest use of a cavity to receive a gradient microphone, because a boom is not a cavity, and a skilled artisan who needs an extension boom would never look to a cavity to function as a boom. Furthermore, applicants' positioning of the cavity and microphone on the temple portion of the earstem omits the requirement for a boom. The present invention is a significant simplification of the alleged combination of the prior art.

During the telephone interview, applicant's representative also presented further comments regarding the patentability of claim 36. As noted above, Syngator simply has no use for a microphone, since his ear protection is intended for use in high noise environments. Thus, the incorporation of a microphone would be inconsistent with this, since loud ambient sounds would make it difficult for the receiving other party to hear the wearer's spoken communications. Accordingly, the rejection of claim 36 has been overcome and should be withdrawn.

Claims 38, and 40-45 are rejected under 35 U.S.C. § 103(a) as being obvious over Syngator in view of Green, and further in view of Spitzer U.S. Patent 6,091,546.

Applicants again repeat the comments made herein regarding the Syngator and Green references. Spitzer was discussed in detail in applicants' amendment of September 6, 2005. In particular, Spitzer does not disclose the features of claim 28, which features are incorporated into claims 38 and 40-45. Accordingly, Spitzer cannot render these claims obvious as suggested in the office action. Thus, this rejection should be withdrawn.

For the foregoing reasons, applicant submits that all of the claims are patentable over the cited art and respectfully requests reconsideration and an early indication of allowance. The Examiner is invited to contact the undersigned if any additional information is required.

Respectfully submitted,

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Date


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